



U.S. Department of Education Green Ribbon Schools 2013

For Public Schools only: ☐ Charter ☒ Title I ☐ Magnet ☐ Choice

Name of Principal: Dr. Lisa Andrus-Johnson

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: Watkins Elementary School

(As it should appear in the official records)

School

Mailing Address: 3915 Watkins Drive

(If address is P.O. Box, also include street address.)

Jackson

MS

39206

City

State

Zip

County USA

State School Code Number\* District #2520 / School #083

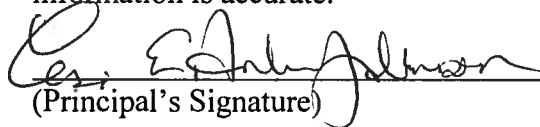
Telephone ( 601 ) 987-3594

Fax ( 601 ) 987-3690

Web site/URL: www.watkinselementarypta.com

E-mail lisjohnson@jackson.k12.ms.us

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

  
(Principal's Signature)

Date 2/6/12

Name of Superintendent\* Dr. Cedric Gray

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name\* Jackson Public Schools

Tel. (601) 960-8700

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. This is one of the highest performing green schools in my jurisdiction.

  
(Superintendent's Signature)

Date 2/07/13

*\*Private Schools: If the information requested is not applicable, write N/A in the space.*



## **PART II – SUMMARY OF ACHIEVEMENTS**

### **Instructions to School Principal**

Provide a concise and coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts in approximately 800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School.

## **PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE**

### **Instructions to Nominating Authority**

The Nominating Authority must document schools' high achievement in each of the three ED-GRS Pillars and nine Elements. For each school nominated, please attach documentation in each Pillar and Element. This may be the Authority's application based on the Framework and sample application or a committee's written evaluation of a school in each Pillar and Element.

### **Nominating Authority's Certifications**

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: MS Dept. of Education Office of Healthy Schools

Name of Nominating  
Authority

Christine M. Philley, M.ED, CFCS  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.



Christine M. Phelley Date 2/8/13  
(Nominating Authority's Signature)

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to [green.ribbon.schools@ed.gov](mailto:green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509  
Expiration Date: February 28, 2015

### **Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

# **GREEN RIBBON SCHOOL NOMINEE**

## **WATKINS ELEMENTARY**

**Jackson, Mississippi**

### **Summary Narrative**

At Watkins Elementary, we have dedicated ourselves to reducing environmental impact and costs, improving the health and wellness of our school community and providing effective environmental and sustainability instruction.

In 2010, Jackson Public Schools implemented a pilot program to identify waste streams created by schools and administrative offices, encourage the various functions of schools to recycle, reduce waste, and promote environmental and civic responsibility. Watkins Elementary was honored to be selected to participate! Two faculty members volunteered to serve on the JPS District Recycling Committee.

Starting in 2010, Watkins began recycling paper products, plastic, and aluminum cans on a daily basis. Periodically, a Saturday is designated a recycling day.

Recognizing the need for effective environmental and sustainability education, our recycling program was expanded into a fully developed environmental awareness program through a collaborative effort involving administration, faculty, staff, parents and community supporters. A recycling / environmental awareness committee was established, which includes teachers, school adopter, and specialty partners. A building committee was also established which includes administration, custodian, teacher, PTA representative, and district advisors.

**America Recycles Day** was expanded into an annual full week of environmental awareness activities. Participants in **America Recycles Week** include – the **Mississippi Recycling Coalition**, **Mississippi Department of Transportation**, **Food Corps**, the **JPS Environmental Coordinator** and **Home Depot**.

Environmental and sustainability concepts are integrated throughout the curriculum. All grades participate in environmental learning field trips. A wealth of professional development opportunities and resources are provided for teachers.

Watkins has received multiple grants - providing a sustainable environmental program that includes a student garden, landscaping, composting, recycling, environmental outdoor learning activities and school-wide events. **Food Corps**, and now, **The Partnership for a Healthy MS** provide classroom instruction.

We expanded Earth Day into **Environmental Awareness Week**. Activities include: visits from **Keep Mississippi Beautiful**, guest speakers, the student garden, the **Great American Clean-Up**, building a **wind turbine**, and a **recycling competition**. Watkins and **Fleet Feet** teamed up to take the **GreenSneakers Eco-Challenge**. Students had the opportunity to sort and weigh sneakers that were collected. **Executive Women International** featured local author / environmental educator **John Stark** at their annual reading rally.

Environmental concepts are also incorporated into assessments. Our program has had an incredible impact on student performance. Since 2010, the number of students performing proficient / advanced on the **Mississippi State Science Test** *increased 41.3%*. By 2012, *63.3%* of our students scored *proficient or advanced!*

Furthermore, Watkins *won* the **KAB State Recycle Bowl** in 2011 *and* 2012 – both times placing in the **Top 20, nationwide**

To reduce environmental impact and cost, the **Jackson Public Schools Sustainability Program** has objectives and goals for our school. Watkins faculty, staff and students follow energy-saving practices. We have made tremendous strides in reduction of greenhouse gas emissions, water and energy usage! Jackson Public Schools partners with **Siemens** to develop strategies to increase energy savings. In the 2011 Siemens Report, Watkins had reduced its **greenhouse gas emissions 22.5%! Electricity** usage was reduced **20%**, while **natural gas** consumption had been reduced **27%! We** also experienced a **35%** reduction in **water** usage!

Health and wellness are also a priority at Watkins. Recognizing the obesity concerns of our state, we initiated the **Watkins Playground Project**, in 2008. We used this project as an opportunity to revitalize our physical education, health and nutrition program. The project is well supported with over 15 local sponsors donating over **\$100,000** to the effort. The playground project has been divided into several phases, based upon available funding. Improvements include equipment for the general school population, some equipment specifically for Pre-K and Kindergarten, a shade canopy, and basketball goals. By the summer of 2013, it will also include resurfacing the blacktop areas, relining the basketball court, and adding at least one swing set to the Pre-K / Kindergarten play area.

In 2011, Watkins won a \$25,000 **Project Fit America** grant from **Blue Cross and Blue Shield Foundation of Mississippi**. PFA includes cardiovascular workstations, training for teachers and students, assessments, and equipment. **Up to 92% showed improvement in fitness post assessments.**

Teachers also participated in the **BCBS Paul Lacoste Fit-4-Teaching** program. We made the **Top 10**, received the **Healthy Lifestyle Change Award** and was recognized for having the best pep rally to promote the Fit-4-Teaching 5K Walk / Run. Over 25 parents, faculty and students participated in the 5K event.

**The Partnership for a Healthy Mississippi** has also been actively involved in our health and nutrition program. Each year, they assist with BMI testing. For faculty and staff, they have offered aerobics classes and workout sessions. Other partnership activities include weekly instruction, wellness walks, Fuel Up to Play 60, Reject All Tobacco (R.A.T.), Just Have a Ball (*free balls for students!*) and more!

Named an **2012 Environmental Hero** by the **Mississippi Recycling Coalition** and recipient of the **2013 MAPE Partnership Excellence Award**, Watkins Elementary is committed to environmental literacy, reducing environmental impact and cost, and improving the health of our school community! Go to [www.watkinselementarypta.com](http://www.watkinselementarypta.com) for more information.



## **Mississippi Green Ribbon School Award Application**

Thank you for your interest in completing the Mississippi application for nomination to U.S. Department of Education Green Ribbon Schools (ED-GRS). In order to complete this application, you will need to collect data about your school's facility, health and safety policies; food service; and environmental and sustainability curriculum.

ED-GRS recognizes schools taking a comprehensive approach to greening their school. A comprehensive approach incorporates environmental learning with improving environmental and health impacts. Becoming a U.S. Department of Education Green Ribbon School is a two-step process. The first step is to complete and submit this form to be selected as a nominee by the Mississippi Department of Education. The second step of the process requires signatures for the nominee package that will be sent to the U.S. Department of Education (ED).

ED selects honorees from those presented by eligible nominating authorities nationwide. Selection will be based on documentation of the applicant's high achievement in the three ED-GRS Pillars:

Pillar I: Reduce environmental impact and costs.

Pillar II: Improve the health and wellness of students and staff.

Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways.

Schools demonstrating exemplary achievement in all three Pillars will receive highest rankings. It is important to document concrete achievement. It will help you to assemble a team to complete the application. This team might include: a facilities manager, physical education director, food services director, curriculum director, finance department representatives, teachers and students. You should consult the ED-GRS resources page for standards, programs and grants related to each Pillar, Element and question. This is an excellent clearinghouse of resources for all schools, not just those who apply.

The questions in this application will help you demonstrate your high achievement in these Pillars as well as provide space for you to include pertinent documentation. You will receive points when you provide documentation for your answers. **Applications are due by December 14, 2012. Please contact Christine Philley in the Office of Healthy Schools [cphilley@mde.k12.ms.us](mailto:cphilley@mde.k12.ms.us) or 601-359-1737, if you have questions or need assistance with your application.**

Note that if selected for nomination to ED-GRS, the school principal and district superintendent must be prepared to certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true; however, in no case is a private school required to make any certification with regard to the public school district in which it is located.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)



2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction as highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

#### School Contact Information

**School Name:** Watkins Elementary School (Jackson Public School District)

**Street Address:** 3915 Watkins Drive

**City:** Jackson      **State:** MS      **Zip:** 39206

**Website: School -** <http://watkins.jpsms.org/> **PTA:** [www.watkinselementarypta.com](http://www.watkinselementarypta.com) **Facebook page:**

**Principal Name:** Dr. Lisa Andrus-Johnson

**Principal Email Address:** [lisjohnson@jackson.k12.ms.us](mailto:lisjohnson@jackson.k12.ms.us) **Phone Number:** 601-987-3594

**Lead Applicant Name (if different):** David Schommer

**Lead Applicant Email:** [dschommer@jackson.k12.ms.us](mailto:dschommer@jackson.k12.ms.us) **Phone Number:** 601-951-9091



<b>Level</b> <input checked="" type="checkbox"/> Elementary (PK - 5 or 6) <input type="checkbox"/> K - 8 <input type="checkbox"/> Middle (6 - 8 or 9) <input type="checkbox"/> High (9 or 10 - 12)	<b>School Type</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private/Independent <input type="checkbox"/> Charter	<b>How would you describe your school?</b> <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural	<b>District Name</b> Jackson Public Schools <input type="checkbox"/> Largest 50 Districts <hr/> <b>Total Enrolled:</b> <u>424</u>
Does your school serve 40% or more students from disadvantaged households? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	% receiving FREE/REDUCED LUNCH: 96% % limited English proficient: 0% Other measures: N/A		Graduation rate: N/A Attendance rate: <u>96%</u>

**Application Outline:**

<u>ED-GRS Pillars and Elements</u>	<u>Points</u>
Cross-Cutting Question: Participation in green school programs	5 points
Pillar I: Reduce environmental impact and costs: 30%	
Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions Energy Buildings	15 points
Element 1B: Improved water quality, efficiency, and conservation Water Grounds	5 points
Element 1C: Reduced waste production Waste Hazardous waste	5 points
Element 1D: Use of alternative transportation	5 points
Pillar II: Improve the health and wellness of students and staff: 30%	
Element 2A: Integrated school environmental health program Integrated Pest Management Contaminant controls and Ventilation Asthma control Indoor air quality	15 points





Moisture control Chemical management	
Element 2B: Nutrition and fitness Fitness and outdoor time Food and Nutrition	15 points
Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways: 35%	
Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems	20 points
Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills	5 points
Element 3C: Development and application of civic knowledge and skills	10 points
Total	100 points

*Summary Narrative:* Provide an 800 word maximum narrative describing your school's efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships.

1. Is your school participating in a local, state or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars?

(X) Yes ( ) No Program(s) and level(s) achieved:

**Jackson Public Schools Recycling Pilot Program 2010-present. Based upon weight estimates provided by Allen's Recycling. Steady increase in total volume / weight of recyclables collected since starting in fall of 2010 -**

**2010-2011: 14 tons**

**2011-2012: 18 tons**

**2012-2013: 20+ tons (*projected*)**

**Project Fit America: BMI testing as well as fitness pre- and post-assessments which include: modified pull-up, vault bar jump, sit-ups, and quarter mile run.**

**Results for 2011-2012**

- **Pull Ups: 85% showed improvement / 15% stayed the same or went down.**
- **Vault Jump: 92% showed improvement / 8% stayed the same or went down.**
- **Sit ups: 88% showed improvement / 12% stayed the same or went down.**
- **¼ Mile Run: 78% showed improvement / 22% stayed the same or went down.**



### **Jackson Public Schools Sustainability Program**

#### **Siemens Industry Inc., 2011 Energy Profile Reports for Jackson Public Schools**

- **Greenhouse Gas Emissions Reduction: 22.5%**
- **Electricity Reduction: 20%**
- **Natural Gas Reduction: 27%**
- **Water Usage Reduction: 35%**
- **Total Energy Savings: \$24,174**

2. Has your school, staff or student body received any awards for facilities, health or environment?

- (X) Yes ( ) No Award(s) and year(s) **Siemens Energy Efficiency Award, Custodial Services Award: Cleanest School / Best Team Work (2009), Watkins Playground Project – Governor’s Award (2010); David Schommer, Playground Project Leader, was named a Grey Ferris Scholar by the MS Association of Partners in Education (MAPE) and an Outstanding Educator by Parents for Public Schools and the Community Foundation of Greater Jackson (2010); MAPE Partnership Excellence Award – Phase II / III Watkins Playground Project (2011); David Schommer named a Metro Jackson Teacher of the Year by the Greater Jackson Chamber Partnership; Project Fit America recipient (2011); Paul Lacoste Fit-4-Teaching Program: David Schommer -Top 10 / Healthy Lifestyle Change Award (2011); MS Department of Transportation Award - “Think Green Keep Mississippi Clean” (2011); Entergy Generation E Grant Winner (2011-Top 7); 1<sup>st</sup> Place, Keep Mississippi Beautiful State Award (2011 and 2012); Keep America Beautiful State Recycle Bowl Grand Champion (2011 and 2012); Top 20 Nationwide – KAB State Recycle Bowl (2011); Top 10 Nationwide – KAB State Recycle Bowl; Watkins Named Mississippi Environmental Hero Educational Institution Recycler of the Year by Mississippi Recycling Coalition (2012). Governor’s Award of Distinction (*highest honor*) for Outstanding Community Partnerships (2012). MAPE Partnership Excellence Award - Recycling / Environmental Awareness (2013).**

Since 2008, over \$100,000 has been raised through multiple sponsors for the Watkins Playground Project. Since 2010, the recycling / environmental awareness program has received over \$7,000 in grants and awards.

### **Pillar I: Reduced Environmental Impact and Costs**

#### **Energy**

1. Can your school demonstrate a reduction in Greenhouse Gas emissions?
- 2.

*“Jackson Public Schools has realized a reduction in Greenhouse Gas Emissions in the amount of 17,823,320 pounds of carbon dioxide.”*

*- Siemens Industry Inc., 2011*



(X) Yes ( ) No Percentage reduction: 22.5% Over (m/yy - m/yy): 01/11-12/11

Initial GHG emissions rate (MT eCO<sub>2</sub>/person): 794 MT eCO<sub>2</sub> / 457 people = 1.87

Final GHG emissions rate (MT eCO<sub>2</sub>/person): 615 MT eCO<sub>2</sub> / 457 people = 1.35

Offsets: N/A

How did you calculate the reduction?

**Siemens Industry Inc., 2011 Energy Profile Report for Jackson Public Schools -  
Calculated from baseline and actual electricity (kWh) and natural gas (Vol in CCF) using  
EPA's Greenhouse Gas Equivalencies Calculator (www.epa.gov)**

2. Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification?

( ) Yes (X) No Year(s) and score(s) received: \_\_\_\_\_

*"At this time, Watkins, does not meet the requirement to be an Energy Star certification."*

- Pamela Young, JPS Environmental Coordinator

3. Has your school reduced its total non-transportation energy use from an initial baseline? (X) Yes ( ) No

Current energy usage (kBtu/student/year): N/A

Current energy usage (kBtu/sq. ft./year): N/A

Percentage reduction: N/A over (m/yy - mm/yy): 01/11 - 12/11

**Baseline/Actual Electricity (kWh) for Watkins Elementary Site**

Baseline: 716,540

Actual: 571,600

Baseline-Actual: 144,940

Percentage reduction: 20% over (m/yy-mm/yy): 01/11-12/11

**Baseline/Actual Natural Gas (Vol) CCF for Watkins Elementary Site**

Baseline: 52,676

Actual: 38,574

Baseline-Actual: 14,102

Percentage reduction: 27% over (m/yy-mm/yy): 01/11-12/11

How did you document this reduction?



Jackson Public Schools has partnered with Siemens Industry Inc. to develop an Energy Master Plan for the schools. Calculations were derived from the Siemens 2011 Energy Profile Report for Jackson Public Schools, Watkins Elementary.

4. What percentage of your school's energy is obtained from:

On-site renewable energy generation: N/A Type \_\_\_\_\_

Purchased renewable energy: N/A Type \_\_\_\_\_

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: N/A

5. In what year was your school originally constructed? **The main building was originally constructed in 1934. Additions were added in 1952.**

What is the total building area of your school? **The total building area is 38,082 Sq. Ft**

6. Has your school constructed or renovated building(s) in the past ten years? ( ) Yes (X) No

For new building(s): Percentage building area that meets green building standards: N/A

Certification and level: N/A Total constructed area: N/A

For renovated building(s): Percentage of the building area that meets green building standards: N/A

Certification and level: N/A Total renovated area: N/A

#### Water and Grounds

7. Can you demonstrate a reduction in your school's total water consumption from an initial baseline?

Average Baseline water use (gallons per occupant): 747,521 total or 1,636 gallons per occupant.

Current water use (gallons per occupant): 489,975 total or 1,072 gallons per occupant.

Percentage reduction in domestic water use: **35% reduction (a savings of \$1,665)**

Percentage reduction in irrigation water use: N/A

Time period measured (mm/yyyy - mm/yyyy): **01/2011 – 12/2011**

How did you document this reduction (ie. ENERGY STAR Portfolio Manager, utility bills, school district reports)?: **Siemens conducts annual water audits for Watkins Elementary. Reductions were calculated using the Siemens 2011 Energy Profile Report for Jackson Public Schools, Watkins Elementary.**



8. What percentage of your landscaping is considered water-efficient and/or regionally appropriate?: **100%**  
Types of plants used and location: Low maintenance plants and trees. Trees are located along the perimeter of the property and in front of the main building. Shrubs and other plants line the buildings.

9. Describe alternate water sources used for irrigation. (50 words max)

**A rain barrel is utilized for rainwater harvesting and is used for the student garden project. It is connected into the building gutter system. Near the bottom of the barrel is a spigot with a hose attachment. The barrel is covered to prevent contamination and mosquitoes from using it as a breeding area.**

10. Describe any efforts to reduce stormwater runoff and/or reduce impermeable surfaces. (50 words max)

**Over 100 trees and shrubs are dispersed over the 12.7-acre school site. The campus design slows the fall of rainwater for quick ground absorption. The school site is constructed with natural slopes to allow for natural run off to small streams and the municipal storm water system.**

11. Our school's drinking water comes from: (X) Municipal water source ( ) Well on school property ( ) Other:

12. Describe how the water source is protected from potential contaminants. (50 words max)

**The City of Jackson Public Water Supply Program ensures safe drinking water to the 2.8 million citizens of Mississippi who utilize the state's public water supplies by strictly enforcing the requirements of the Federal and State Safe Drinking Water Acts (SDWAs).**

13. Describe the program you have in place to control lead in drinking water. (50 words max)

**The City of Jackson routinely monitors drinking water according to Federal and State laws. No lead violations found. To minimize risk, we drink / cook only with water that comes out of the tap cold. Water lines are run momentarily prior to drinking or cooking. Water fountains are cleaned regularly.**

14. What percentage of the school grounds are devoted to ecologically beneficial uses? (50 word max)

**Over 75% of the 12.7 acres is preserved for environmental and fitness uses. The beautiful campus has an abundance of trees, shrubs, other plants, student garden and butterfly garden. The main entrance is nicely landscaped. Well maintained shrubs and other decorative plants line the main building.**

#### Waste

15. What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or composting? Complete all the calculations below to receive points.

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected):



\* 1.17 cu.yds daily X 20 collections X 100% collected = **23.4 cubic yards / month**

\* 6 – 34 gallon bags (204 gal) with 1 Cubic Yard (dry) = 173.569813 Gallons

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected):

\* 6 cu.yds. X 4 collections X 100% collected = **24 cu.yards. / month**

\* 13 – 96 gallon bins

C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected):

8 cu.yds X 20 collections X 25% collected = **40 cu.yards / month**

Recycling Rate =  $((B + C) \div (A + B + C) \times 100)$ :

$(24 \text{ cu.yd.} + 40 \text{ cu.yd.}) \div (23.4 \text{ cu.yd.} + 24 \text{ cu.yd.} + 40 \text{ cu.yd.}) =$   
 $(64 \text{ cu.yd.} \div 87.4 \text{ cu. yd}) \times 100 = \mathbf{0.73 \text{ or } 73\% \text{ Recycling Rate}}$

Monthly waste generated per person =  $(A/\text{number of students and staff})$ :

23.4 cu. yds / \*474 students/staff = **0.049 cu.yd. / month**

\* 2012-2013

16. What percentage of your school's total office/classroom paper content is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free? **90%**

17. List the types and amounts of hazardous waste generated at your school:

Flammable liquids	Corrosive liquids	Toxics	Mercury	Other:
N/A	N/A	N/A	N/A	N/A

How is this measured? **N/A.**

How is hazardous waste disposal tracked? **N/A**

Describe other measures taken to reduce solid waste and eliminate hazardous waste. (100 word max)



**Jackson Public Schools has established procedures for the removal and proper disposal of computer hardware and electronics. Jackson Public Schools has established strict procedures for proper storage and usage of cleaning supplies and chemicals.**

18. Which green cleaning custodial standard is used?

What percentage of all products is certified? N/A

What specific third party certified green cleaning product standard does your school use? N/A

**Note: Deodorizer and absorbent is biodegradable; furniture polish contains no CFCs; cleaner is a non-acidic disinfectant; floor wax is non-flammable and may be only mildly irritating to eyes and skin; institutional antimicrobial liquid soap is used. Empty containers are recycled, where applicable.**

#### Alternative Transportation

19. What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school? (Note if your school does not use school buses)

**Bus: 58%; Carpool: 25%; Individual Pickup: 12%; Walk: 5%; Bike: 0%.**

How is this data calculated? (50 word max) **Data was collected by speaking directly with each classroom teacher and actual observation of afternoon car duty. We have several daycare services providing van transportation. Buses are necessary due to the majority of students living in local apartment complexes quite a distance from the school and along a busy street.**

20. Has your school implemented?

☒ designated carpool parking stalls. **Buses and daycare vans have a designated area at the front of the line each afternoon for student pickup.**

☐ a well-publicized no idling policy that applies to all vehicles (including school buses).

☐ Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.

☒ Safe Pedestrian Routes to school or Safe Routes to School

Describe activities in your safe routes program. (50 word max)

**Safe Routes to School lesson plans (Office of Healthy Schools, Mississippi Department of Education) are utilized. Safe Routes assemblies, through the Mississippi Department of Health, are scheduled for March 20<sup>th</sup>, April 3<sup>rd</sup> and April 17<sup>th</sup>, 2013. Watkins is participating in Walk-to-School Day on October 9, 2013.**



21. Describe how your school transportation use is efficient and has reduced its environmental impact. (50 word max). **Jackson Public Schools utilizes Versatrans Routing & Planning – a flexible, easy-to-use school bus routing and planning software. Specifically designed to improve operational workflow in school transportation departments, Versatrans not only reduces workload but also assists in reducing fuel costs and emissions – without reducing the level of service.**

22. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (100 word max)

**Jackson Public Schools partners with Siemens Industry Inc. Building Technologies Division to develop strategies to increase energy savings and improve overall service. Siemens provides annual district energy profile reports. The transportation department is included in that report. According to the 2011 report, the North and South Transportation Departments reduced energy usage 151,070 kWh saving the district \$12,208. The partnership has been further strengthened through training, communication, and teamwork.**

## **Pillar 2: Improve the health and wellness of students and staff**

### **Environmental Health**

1. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use:

**Integrated Pest Control ([www.intergratedpestms.com](http://www.intergratedpestms.com)) provides complete pest control service for Watkins Elementary. They are fully insured, licensed and bonded. Utilizing a combination of liquid and bait treatments, and strategically targeting only those areas where a pest situation is most likely to occur, they are able to reduce use of product while still providing quality service. Using no more than 12-16 gallons of pesticide product during an entire year, the gal/student/year is negligible. The bait that is utilized is generally small and used only in areas where students would not have access.**

2. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? Provide specific examples of actions taken for each checked practice.

[ X] Our school prohibits smoking on campus and in public school buses.

**By policy, Jackson Public School District prohibits smoking by all staff, students, visitors, or guests in all school district buildings, district vehicles, and on district grounds. It is specifically directed that the smoking ban will be in effect 24 hours a day, seven days a week, and will apply to anyone present in school district buildings, district vehicles, and on district grounds. Signs are posted, policy is published & verbally enforced.**

**Procedures for implementing Board policy regarding nonsmoking affect four (4) groups of persons -**





- A. Employees found to be in violation of the District smoking policy will be disciplined according to the following management system: first offense verbal warning; second offense written warning with a copy in employee's file; third offense disciplinary procedures which may lead to dismissal.**
- B. Community Groups who use school facilities must abide by this policy. The package distributed to groups who request building utilization forms shall include a copy of the smoking/tobacco products policy. If it is discovered that an individual group is not in compliance with this policy, that group will be denied use of District facilities for a period of no less than 18 months.**
- C. Spectators at outside school sponsored events will be encouraged to abide by the tobacco free ban on district grounds.**
- D. Students found to be in violation of the district smoking policy shall be disciplined in accordance with district policy and procedures on student discipline.**

☒ Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school.

*"We have stopped the purchase of thermometers. Many of the elementary schools did not have any sources."*  
-Pamela Young, JPS Environmental Coordinator

☒ Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO)

**A qualified technician is sent by the district to conduct regular inspections and maintenance on all fuel-burning appliances. Gas ranges and ovens are not used to heat the cafeteria and kitchen. "Outdoor" cooking appliances are not used indoors. Carbon monoxide detectors carrying the Underwriters Laboratories (UL) listing have been installed to detect long-term, high-level CO concentrations and short-term, low-level CO concentrations. Our cafeteria has a fire suppression system / extinguishers and is inspected annually. The cafeteria is also inspected regularly by the Mississippi Department of Health and has an "A" rating.**

☐ Our school does not have any fuel burning combustion appliances

☒ Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.

*"Areas that are at ground level are used at a set time for feeding and the exchange of occupants is often. The incidence of radon in the area is very low according to Mississippi DEQ maps and EPA maps. This map along with the use of space and the exchange rate of occupants testing has not been performed."*

– Pamela Young, JPS District Environmental Coordinator



[X] Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure.

**Due to health, safety and liability concerns, our old wooden playground equipment was removed by Jackson Public Schools, in the summer of 2007. Since that time, the Watkins PTA has raised over \$100,000 to replace the equipment with that which is commercial grade and district approved for our student body.**

3. Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure. (100 word max)

**Jackson Public Schools has an Office of Risk Management that has established a Risk Management Program that includes a Departmental Procedure Manual which outlines proper usage and storage of chemicals. Chemicals are kept locked up and out of reach throughout the facility. Maintenance and custodial closets are kept locked at all times. Students are not allowed access to these areas. Jackson Public Schools provides specific safety training to custodial and maintenance staff. Safety practices - including usage and storage of chemicals – is also incorporated into general faculty / staff development on a regular basis.**

4. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100 word max)

- 1. Parents submit an asthma action plan (AAP) developed and signed by the child's physician/healthcare provider. The AAP is updated annually and kept on file in the school office for use by school personnel. Teachers are informed of affected students.**
- 2. Emergency protocol developed for all personnel.**
- 3. Student exposure to dust, gases, fumes, and other pollutants is minimized.**
- 4. Using hazardous substances around school buildings while children are present is prohibited.**
- 5. An integrated pest management program is utilized which includes proper application of pesticide.**

**Other actions include:**

- 1. Carpet removed from majority of facility.**
- 2. Community workdays include classroom cleaning.**

5. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup mold or removes moldy materials when it is found. (100 word max)

**The facility is inspected on a regularly. Teachers report leaks, mold or mildew to the school office. The office manager submits work orders to the district. The HVAC system is inspected and serviced on a regular basis. Outside professionals are contacted for air quality testing and advice. Community workdays are held twice a year to allow for additional cleaning, minimizing mold growth. The PTA, adopters, and specialty partners provide equipment, supplies, or volunteer assistance where needed. A portable dehumidifier is available should excess humidity and condensation occur. Custodial staff promptly cleans up mold or removes moldy materials, if found.**



6. Our school has installed local exhaust systems for major airborne contaminant sources. ( )Yes (X)No

**There are no major contaminants. Therefore, an additional exhaust system is not necessary.**

7. Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. (100 word max)

**The HVAC system is inspected and serviced by the district. HVAC system filters are cleaned or replaced regularly while ensuring proper installation, correct size and fit. The HVAC system is controlled by the school district to maximize efficiency and help maintain the system. Paints, cleaners, or other chemicals are not allowed to be stored in HVAC equipment rooms to avoid potentially harmful vapor contaminants being circulated throughout the facility. Custodial staff and an executive team member conduct informal inspections and report any additional required maintenance.**

8. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards. (100 word max)

**The building is designed with a multitude of windows throughout the facility that is opened for additional ventilation. This is consistent with the building code for the building at the time. The district inspects windows to ensure they are in operating condition and makes repairs, if necessary. Portable box fans are made available should occasional forced air be required. There have not been any renovations to the HVAC system since this time. The HVAC system is inspected and serviced by the district. HVAC system filters are cleaned or replaced regularly, while ensuring proper installation, correct size and fit. The HVAC system is controlled by the school district to maximize efficiency and help maintain the system.**

9. Describe other steps your school takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. (200 word max)

***"Members of the Jackson Public Schools Facility staff are assigned to conduct inspections and to report any environmental health and safety issues. The school office manager then submits a work order to the central office, which in turn sends out the necessary personnel to make the corrective action. The school district has implemented an Asthma Management policy that includes many of the key components of the EPA's Tools for schools."***

**– Pamela Young, JPS District Environmental Coordinator**

#### Nutrition and Fitness

10. Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (100 word max each)



[X] Our school participates in the USDA's HealthierUS School Challenge.

Level and year: Gold, 2012

**Watkins Elementary as well as 38 other JPS elementary schools received a Gold Award from the United States Department of Agriculture's (USDA) HealthierUS Schools Challenge. A ceremony was held to celebrate the awards Tuesday, September 11, 2012, at Cardozo Middle School. Dr. Janey Thornton recognized the schools for improving its school meals and meeting the HealthierUS School Challenge (HUSSC). During her presentation at the ceremony, Secretary Thornton discussed the back to school initiative "The School Day Just Got Healthier" highlighting the USDA's new school meal standards."**

[X ] Our school participates in a Farm to School program to use local, fresh food.

**Sunrise Fresh Produce, our produce provider – "...sources, procures, and receives produce direct from growers and shippers nationally as well as right here in Mississippi!" Luvel Dairy Products, Inc. (Kosciusko, Mississippi) is the predominant milk processor for the state (recently acquired by Prairie Farms), and is our provider of milk. Our student garden project has produced cucumbers, tomatoes (salad, big boy and better boy), turnip greens, mustard greens, broccoli, collard greens, okra, basil, rosemary, parsley, limes, and strawberries. Field trips are taken to the Mississippi Agriculture and Forestry Museum, pumpkin patch, and local farms.**

[X] Our school has an on-site food garden.

**In 2011, Watkins participated in Entergy's Generation E Grant Competition and won a \$2,500 grant for recycling / environmental awareness activities including the installation of a student garden. Sponsors providing volunteers, materials, classroom instruction and more include Food Corps, Partnership for a Healthy MS, Hobbs Masonry, Old South Brick, Creative Mind Construction, The City of Jackson, Home Depot and Meadowbrook Church. A student garden club was established with Home Depot providing student planter kits and volunteer assistance. A school garden committee was established to oversee the project. The student garden can be found at [www.watkinselementarypta.com](http://www.watkinselementarypta.com).**

[X] Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. **Fruits, herbs and vegetables are harvested on a regular basis by faculty, staff, students and the local community. Working in conjunction with the Partnership for a Healthy Mississippi, a cooking demonstration with a local celebrity chef is scheduled to take place during this year's Environmental Awareness Week, April 22 – 26, 2013.**

[X ] Our students spent at least 120 minutes per week over the past year in school supervised physical education.



Watkins is a Project Fit America school. Through effective, flexible scheduling, all students have a minimum of 210 minutes per week of instruction through a combination of physical education, physical activity and activity-based instruction. All students receive a minimum of 60 minutes per week of health education. Kimberly Armstrong serves as our full time PE instructor while David Schommer serves as PFA On-Site Director. For more information pertaining to Project Fit America, go to [www.projectfitamerica.org](http://www.projectfitamerica.org). Documentation of Watkins participation in the program can be found on the PTA website: [www.watkinselementarypta.com](http://www.watkinselementarypta.com).

☒ At least 50% of our students' annual physical education takes place outdoors.

**ALL** physical education takes place outdoors, *weather permitting*. On inclement weather days, physical education classes take place in the school auditorium. In addition, through the Watkins Playground Project, over \$100, 000 has been invested in outdoor playground and exercise equipment. An attractive, well maintained playground is a wonderful incentive for students to remain active outdoors. All students participate in Project Fit America. Project Fit America is Phase IV of the Watkins Playground Project, which was started in 2008. Additional information can be found at [www.watkinselementarypta.com](http://www.watkinselementarypta.com).

☒ Health measures are integrated into assessments.

All students participate in health / nutrition instruction and assessment through our physical education program and in the regular classroom. Since the implementation of Project Fit America in the fall of 2011, student pre-assessments and post assessments are taken *annually*. The Partnership for a Healthy Mississippi assists with calculating the Body Mass Index (BMI) of the students and conducts nutrition surveys, instruction and assessments. PFA / Blue Cross & Blue Shield fitness pre- and post-assessments include: modified pull-up, vault bar jump, sit-ups, and quarter mile run. The Jackson-Hinds Comprehensive Health Center periodically provides free health and dental screenings.

☒ At least 50% of our students have participated in the EPA's Sunwise (or equivalent program).

PreK – 5<sup>th</sup> grade teachers use components of the EPA's Sunwise program with their students. Recognizing that the health risk involving children and unprotected exposure to ultraviolet (UV) rays from the sun, the Watkins incorporated a large 30' X 30' shade structure to cover the playground equipment in Phase II of the playground project.

☐ Food purchased by our school is certified as "environmentally preferable"

Percentage: \_\_\_\_\_ Type: \_\_\_\_\_

Jackson Public School District Food Service Operations are administered through the United States Department of Agriculture, the Mississippi Department of Education and the local School Board. Comprehensive regulations must be followed in order for the school district to be eligible for federal funding. It is our goal to serve well-balanced, nutritious meals to all students, faculty,



and staff members. JPS utilizes NUTRIKIDS Menu Planning and Nutritional Analysis software to comply with new USDA meal pattern regulations, dietary guidelines and the district's Wellness Policy. Sunrise Fresh Produce, our provider - sources, procures, and receives produce direct from growers and shippers nationally as well as right here in Mississippi! Luvel Dairy Products, Inc. (*Kosciusko, Mississippi*) is the predominant milk processor for the state and is our milk provider.

11. Describe the type of outdoor education, exercise and recreation available. (100 word max)

**Watkins Playground Project (2008-present)**

**Phase I (2008-2009):** \$40,000 of equipment appropriate for the general population.

**Phase II (2009-2010):** \$16,000 of Pre-K and Kindergarten equipment.

**Phase III (2010-present):** *Under construction*. Currently invested: \$19,000+. Includes shade canopy, blacktop resurfacing, game stencils, basketball goals, and additional swing-set.

**Phase IV (2011-2012)** Project Fit America! \$25,000 invested.

**We have a beautiful, spacious playground area! Outdoor education, exercise and recreation include, but are not limited to: formal PE instruction utilizing the new PFA equipment, supervised play on playground equipment, outdoor games, field day, and other competitions.**

12. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. (100 word max)

**The Partnership for a Healthy MS conducts multiple activities including – BMI testing, weekly nutrition and gardening instruction, the Watkins Watermelon Walk & Dance-Off, “Dairy Delivers Healthy Kids”, Fuel Up to Play 60, Milk Mustache Day, Yogurt Smoothie Taste Test, “Breakfast with a Hero”, Faculty Aerobics, Reject All Tobacco (R.A.T.), and Just Have a Ball (*free balls for all students!*). Other activities: AmeriCorps Double Dutch tournament, Farm Bureau Field Day, Fresh Fruit and Vegetable Program, Wellness Walks, National School Lunch Week, EWI Reading Rally (*health theme– 2010/2011*), JSU Baseball Team, and Paul Lacoste’s Fit-4-Teaching .**

### **Pillar 3: Effective Environmental and Sustainability Education**

1. Which practices does your school employ to help ensure effective environmental and sustainability education? Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships.

☒ [X] Our school has an environmental or sustainability literacy requirement. (200 word max)



**To ensure effective environmental and sustainability education, Watkins expanded its existing recycling program into a fully developed environmental awareness program.**

### **America Recycles Week**

- Teachers incorporate recycling, environmental awareness & conservation into instruction utilizing materials purchased through **PTA**.
- Student council clothing drive.
- Recycling Student Poster Design / Coloring Contest
- Recycling Student Banner Competition
- Student Garden Club builds planters -**Home Depot / Food Corps**.
- Student Assembly – **MDOT’S Myrtle the Turtle and Keep Mississippi Beautiful**
- Student Letter Writing Campaign - *support recycling!*
- Student Recycling Art Project – Students create a work of art from recycled materials.
- America Recycles Day Assembly-**Allen’s Recycling** and **Pamela Young** (*JPS Environmental Coordinator*).

### **Earth Day / Environmental Awareness Week**

- School-wide Spring Recycle Blitz – **Allen’s Recycling**
- Great American Cleanup – **Keep MS Beautiful & MDOT**
- 5<sup>th</sup> Grade Wind Turbine Project – **Entergy**
- Student Garden Project – **Entergy, Food Corps, PHMS, Home Depot, and others.**
- Sammy the Soil – **Hinds County Soil and Water**

### **Other Environmental Activities**

- State Recycle Bowl – **Allen’s Recycling** (*Grand Champion - 2011 & 2012*)
- GreenSneaker’s Eco-Challenge – **Fleet Feet** (2012)
- EWI Reading Rally: **John Stark** (2012)
- Tree Planting –**Hinds County Soil and Water**
- Read Across America with **Keep MS Beautiful and Hinds County Soil and Water**

### **Mississippi Recycling Coalition**

- Daily recycling - **Allen’s Recycling** (2010-present)

[X] Environmental and sustainability concepts are integrated throughout the curriculum. (200 word max)

The Mississippi Science Framework helps guide the science curriculum. Environmental and sustainability concepts are integrated in all grades and throughout the curriculum, including math, science, social studies, reading and language. Concepts include, *but are not limited to*:

**Kindergarten:** conserving water, reuse / reuse / recycle, earth's resources, and how environmental hazards can affect organisms living in specific areas

**1<sup>st</sup> Grade:** Distinguishing how actions or events related to Earth's environment may be harmful or helpful, examining pollution, reduce / reuse/ recycle, and identifying sources of energy.

**2<sup>nd</sup> Grade:** Suitability of different environments to sustain life, reduce / reuse / recycle, endangered species, and composting.

**3<sup>rd</sup> Grade:** Harmful and helpful human actions affecting the environment, preventing pollution, life cycles, recycling of water, reduce / reuse / recycle, composting, Earth temperature and glaciers.

**4<sup>th</sup> Grade:** External forces that affect the Earth's surface, reduce / reuse / recycle, watersheds and run-off patterns in local areas, analyzing /predicting weather, water conservation, protecting / managing the environment, habitat survival, and forms of energy.

**5<sup>th</sup> Grade:** Ecosystems and biomes, investigating resources / factors that promote and limit population growth, reduce / reuse / recycle, biological adaptations, research and investigation of environmental changes, including pollution.

[X] Environmental and sustainability concepts are integrated into assessments. (200 word max)

Entry level, formative and summative assessments are utilized by the school and district. Entry level assessments help determine student readiness. Formative assessments are used to check for understanding during the lesson. Summative assessments are used to determine the extent of student learning. Assessments are aligned to state standards. Assessments are administered on a weekly / bi-weekly basis, depending upon grade level. Mid-terms and semester exams are also administered. Environmental and sustainability concepts are integrated into assessments. Grades 3-5 also participate in the Mississippi Curriculum Test (MCT2). The results of this criterion referenced assessment is used in the Mississippi Statewide Accountability System, specifically the Achievement, Growth, and Adequate Yearly Progress (AYP) Models. In addition, The Mississippi State Science Test (MST2) is administered to the 5<sup>th</sup> grade, each year. This criterion-referenced assessment is aligned with the Mississippi Science Framework and meets the requirements of No Child Left Behind. The results of this assessment are a part of Mississippi's school accountability system. All school, district and state assessments are analyzed, understood and used for the purpose of improving student achievement.

[X] Students evidence high levels of proficiency in these assessments. (100 word max)

#### **Mississippi State Science Test**

**Percentage of Students Performing \*Proficient / Advanced:**

**2008-2009: 22%**





2009-2010: 29% (up 7%)  
2010-2011: 34.9% (Up an additional 5.9%)  
2011-2012: 63.3% (Up an additional 28.4%)  
2012-2013 – Results in May/June, 2013

*\*Source – Mississippi Department of Education, Mississippi Assessment and Accountability Reporting System.*

**Watkins named National Title I School of Distinction (2009)**  
**Watkins rated Level 4 / High Achieving, MS Department of Education (2009)**  
**Watkins rated Level 5 / Star School, MS Department of Education (2011)**

[X ] Professional development in environmental and sustainability education are provided to all teachers. (200 word max)

All faculty and staff participate in professional development. The recycling / environmental awareness coordinator works collaboratively with the principal and teachers in developing a meaningful and effective program. In 2010, Watkins established a recycling / environmental awareness committee. In 2011, Watkins established a garden club to provide support for the student garden project. Faculty members David Schommer and Marilyn Minter serve on the JPS District Recycling Committee. In addition, instructional materials are made available to teachers through the Mississippi Department of Transportation, the Mississippi Recycling Coalition, Keep America Beautiful, Keep MS Beautiful, private donations and the Watkins PTA. In 2011, Watkins was able to provide teachers *additional* resource materials for environmental and sustainability education – thanks to a \$5,000 grant from the Laura Bush Foundation. We were able to supplement our library collection with a large number of books and teacher resource materials pertaining to recycling, environmental awareness, gardening, health, nutrition, and physical fitness. These materials are made available to teachers on a regular basis. Teachers actively utilize the new resources throughout the school. Professional development opportunities are also made available through the Mississippi Children's Museum, Mississippi Museum of Natural Science and the Hinds County Soil and Water Conservation District.

2. For schools serving grades 9-12, provide: N/A.

Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: N/A Percentage scoring a 3 or higher: N/A

3. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (200 word max)

In 2012, 5<sup>th</sup> grade students participated in a Vertical Axis Wind Turbine project, which was funded by Entergy's Generation E Grant. The kits were provided by All About Learning, Inc. – a company that specializes in teaching Science, Technology, Engineering, and Math (STEM). During Environmental Awareness Week, our three classes of 5<sup>th</sup> grade students - 1) Explored modern energy sources

differentiating between renewable and non-renewable 2) investigated the origin of wind and the relationship between natural science and technology 3) studied and discussed the basic concepts of a modern wind turbine 4) investigated alternative energy sources, with a focus on wind energy and subsequent electricity production 5) explored new designs of wind turbines, especially the Vertical Axis Wind Turbine (VAWT) and 6) successfully constructed of a working Vertical Axis Wind Turbine model. Construction of the model turbine required teamwork, identification and sorting of components by function, measurement and assembly. Instruction was provided by Recycling / Environmental Awareness Coordinator David Schommer with assistance from the classroom teachers. Students were allowed to take their completed models home at the end of the week.

4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (200 word max)

**In addition to the Vertical Axis Wind Turbine project as a springboard to learning about green technologies, the Watkins Recycling / Environmental Awareness Program provides many opportunities for students to meet professionals from various fields including representatives from Hinds County Soil and Water, MDOT, Keep MS Beautiful, Allen's Recycling, local university scientists, the Traveling Space Museum (*sponsored by Jackson State University*), Natural Science Museum, Food Corps, the Partnership for a Healthy Mississippi, John Starks, Eaton Aerospace, and more.**

5. Describe students' civic/community engagement projects integrating environment and sustainability topics. (200 word max)

**In 2012, students at Watkins teamed up with Fleet Feet of Jackson to participate in the GreenSneakers Eco-Challenge. For 15 days, Watkins and Fleet Feet collected used sneakers to be reused as affordable footwear for people around the world, help support third world countries and help raise funds for our school. Most sneakers are made from heavily processed crude oil. By donating the shoes, we are keeping them out of landfills *since sneakers may take anywhere from 50 to 1,000 years to break down*. Providing affordable footwear to third world countries not only enhances economic development and sustainability both here and abroad, but also helps in job creation. In just over 2 weeks, Watkins and Fleet Feet had collected 925 pounds of sneakers – setting a company record by collecting the most sneakers in the shortest amount of time. Students actively sorted and weighed the shoes we collected. Other civic/community projects integrating environment and sustainability topics include our student garden project, garage sale, clothing drive, community workdays, recycling program, Great American Cleanup, Space Day Event *and more!***

6. Describe students' meaningful outdoor learning experiences at every grade level. (200 word max).

Teachers take advantage of multiple outdoor learning experiences, including:

- a. **Watkins student garden project, butterfly garden, outdoor classroom, and nature walks around campus (PreK – 5<sup>th</sup>)**

- b. **Mississippi Agriculture and Forestry Museum** – which includes barnyard, livestock, small town Mississippi, trail, cotton gin, sugarcane and saw mill, gardens, learning / heritage centers, and more. (PreK, 4<sup>th</sup>)
  - c. **Mississippi Museum of Natural Science** – Outdoor exhibits: Native plant garden, prairie garden plot, grove, wetland pond, mature forest, creek, swamp, backwater, trails, greenhouse and more. Inside: An aquarium system houses native fishes, reptiles, amphibians, and aquatic invertebrates. (K, 5<sup>th</sup>)
  - d. **Jackson Public Schools Environmental Learning Center** - 640 acres! Educational programs include: gardening, soil erosion, nature trails, fishing, water testing, catfish feeding, soil conservation, recycling, pollution, and plant/tree identification. (2<sup>nd</sup>, 3<sup>rd</sup>)
  - e. **Mississippi Children's Museum** –Educational programs – MS Heritage, health & nutrition, literacy, arts and culture, science and technology. (PreK, Open Doors)
  - f. **Trace Pathways Farm** - Mazes, agriculture careers, history of farming practices, scientific observations, environmental science, animal science, life science and regional information including climate, farm preparation, benefits of plants, grassland, and use of natural resources. (1<sup>st</sup>)
  - g. **Jackson Zoo** - Educational programs are aligned with Mississippi Academic Standards. (PreK-5<sup>th</sup>)
7. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (200 word max)

**Outdoor learning experiences at Watkins has helped our students to be good stewards of the environment and develop an appreciation for community service. Students are responsible for transporting and sorting recyclable items. Students had the opportunity to read a scale and calculate total weight as part of the GreenSneakers Eco-Challenge. Students also had the opportunity to compost, build wind turbines, identify types of plants, set bricks for the garden beds, plant shrubs, seeds and seedlings, and fill garden beds with soil provided by the City of Jackson. Sponsors and community volunteers for our science related outdoor programs include Jackson State University, Home Depot, Traveling Space Museum, Jackson Fire Department, Mississippi National Guard, Jackson Fire Department, Eaton, Food Corps, Entergy, the Natural Science Museum, Partnership for a Healthy Mississippi, JPS Security, Watkins PTA and our adopter, Southern Farm Bureau.**

8. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 200 words)

**Our partnerships have been outstanding! All total, our partnerships have invested approximately \$110,000 over the past 4 years to improve our nutrition, health, fitness, recycling and environmental awareness programs. Watkins now has accumulated over 25 adopters, specialty partners, sponsors and community volunteers. Over 400 students and their families have been impacted! Siemens helped by providing data necessary for Pillar I. The following are just *some* of our supporters that have helped with Pillars II and III: Allen's Recycling, Keep MS Beautiful, Mississippi Department of Transportation, Blue Cross & Blue Shield Foundation of MS, Entergy, Home Depot, Hobbs Construction, Creative Mind Construction, Food Corps, Partnership for a**



Healthy MS, Hinds County Soil and Water, the City of Jackson, GreenSneakers, Fleet Feet, Mississippi Recycling Coalition, Clarion Ledger, Traveling Space Museum, Jackson State University, Jackson Public Schools, Watkins PTA, and many more. In 2011, Watkins Elementary was named a Star School by the Mississippi Department of Education. In 2012, Watkins received the Governor's Award of Distinction (highest award) for its Outstanding Community Partnerships! On February 21<sup>st</sup>, Watkins will receive the MAPE 2013 Partnership Excellence Award for our Recycling / Environmental Awareness Program!

9. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships. (Maximum 200 words)

**What makes our approach to environmental and sustainability education truly unique is our ability to establish and maintain effective community partnerships. We approach any special program (playground project, Project Fit America, student garden, recycling / environmental awareness, etc.) from a sustainability standpoint. We take each program, collaborate on how the projects are related to the curriculum, break it down into manageable components, then establish reasonable goals, and timelines. Responsibilities are delegated based upon talents and abilities. Student and faculty incentives are established. We are careful to study how all the special programs are interrelated. This is very important. Example: The playground project is related to our health, physical fitness and nutrition program, nutrition is related to the student garden project, which is related to our recycling / environmental awareness program, which involves personal responsibility and community service. The principal provides flexible scheduling to allow time to actively pursue and establish effective partnerships with the community. Communication within the school and community is on-going and includes newsletters, websites, Emails, announcements over the PA system, memos, and phone. Sponsors are kept informed of our progress, provided multiple opportunities for involvement, and are given recognition for their support.**

10. Submit 10 photos or up to 5 minutes of video content.



# Recycling: Watkins Wins State Recycle Bowl!

Watkins Elementary recently **WON** the Keep America Beautiful **State Recycle Bowl Competition!** Not only did we win state, but we made the **Top 20 nationwide!** Items collected included paper, plastic and aluminum. Awards were given at the America Recycles Day Assembly, held on November 15th, in the school auditorium. Award categories included: grade level, school wide (Grand Champion), outstanding student participation, outstanding adult participation, and leadership. The Watkins Recycling Program also came in **1st Place** at the Keep MS Beautiful Annual Awards Luncheon for the second consecutive year. The successful program also received another **\$1,000 grant** from the Mississippi Recycling Coalition!





# Project Fit America Kickoff Highlights!



**Photos—** Top Left: Pre-K participates in the kickoff parade! Top Right: PE Instructor Kimberly Armstrong leads the students in a "Peanut Butter Jelly Time" song dance-off; Top Left: Sheila Grogan, Executive Director of the Blue Cross Blue Shield of Mississippi Foundation, participates in the ribbon cutting, along with David Schommer, Project Leader for the Watkins Playground Project, Dr. Lisa Andrus-Johnson, Principal (far right) and JPS dignitaries. Middle Left: 1st grade teacher Marilyn Minter participates in the celebrity hoola-hoop competition. Bottom Left: The event began with a school-wide Second Line Parade. Middle Right: The Jackson All-Stars Brass Band provided musical entertainment. Above Left: The MS National Guard provided the Color Guard. Above Right: A student demonstrates how to use the new Project Fit America equipment.